

ON THE APPEARANCE AND DISAPPEARANCE OF A  
MUD ISLAND AT WALFISH BAY.

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(Read August 1, 1900.)

Plates XXVIII., XXIX., XXX., XXXI.

In submitting the facts in connection with the appearance and disappearance of a mud island in Walfish Bay, it will perhaps be advisable to give first a description of the locality in which the phenomena took place, together with the information which is furnished in the *South African Pilot*, No. 2 of 1884, pp. 208-210.

WALFISH BAY.

“Pelican Point, the western point of Walfish Bay, lies south 69 miles from Cape Cross, the intervening coast, which bends to the eastward, is distinguished by white sandhills of moderate elevation falling suddenly to the sea. It is entirely free from any known danger excepting off the River Swakop, and there are depths of 4 to 6 fathoms at the distance of a quarter of a mile off shore. Pelican Point is in latitude  $22^{\circ} 52' 30''$  S., longitude  $14^{\circ} 27' 15''$  E.

“Walfish Bay was surveyed in 1825 by the officers of H.M.S. *Leven*, and the information resembles most of the other harbours on this coast as far north as St. Paul de Loando. Its westerly side is a sandy peninsula nearly four miles in length, terminating at its northern end in Pelican Point, where the breadth of the entrance is  $3\frac{3}{4}$  miles.

“The Bay is spacious and safe, being protected on all sides excepting the north and north-west, whence winds are fortunately not of frequent occurrence. All the shore is of sand, and the soundings regular from 8 to 3 fathoms, but within the peninsula, along the western shore of the Bay, the water is shoal, and the coast at the bottom of the Bay low and marshy. . . .

“The River Kuisep runs into the depth of this Bay. It trends to

the southward for a distance of about 35 miles, and then turns sharply to the eastward into the interior. . . .

“*Remarkable Soundings.*—The soundings on all this coast are dark muddy sand, the action of which upon metals turns them black, which effect was produced upon our leads and chain cables, making them appear as if painted.”

#### DESCRIPTION OF THE MUD ISLAND.

On the 1st of June, 1900, Miss Cleverley, the daughter of the Resident Magistrate of Walfish Bay territory, whilst scanning the horizon with a field-glass from the settlement at the head of the Bay saw a dark object resembling the hull of a vessel lying inside the Bay, just off Pelican Point, a distance of  $6\frac{1}{2}$  miles from the settlement. To ascertain what this object was, steam was immediately got up in the launch, and Mr. Cleverley, with a small party, proceeded to the spot. As Pelican Point was neared, it was found that a mud island had appeared on the inner side at about 100 yards from the shore. (See Chart, Plate XXVIII.)

Careful soundings taken close to and around the island gave depths of 7 to 8 fathoms. The dimensions were approximately 150 ft. long, 30 ft. wide, and the height 15 ft. above the surface of the sea; the sides under water appeared to be nearly vertical, but above water pieces had been washed off by the sea, giving the jagged appearance shown on the photograph (Plate XXXI.). Whilst we were there several large pieces fell off into the sea.

A very strong odour of sulphuretted hydrogen pervaded the spot, and steam appeared to issue from the northern end of the mass. I was afterwards told that the smell from the island was noticed at Swakopmund, a distance of 25 miles from Walfish Bay.

The next day (June 2nd) we visited the island to make a more minute examination. Soundings were taken again with similar results. Lieutenant Gutsche, of the Cape Garrison Artillery, swam off from a boat, it not being possible to land otherwise, and procured a specimen of the mud.

Since the previous day a large quantity of the material had fallen off into the sea. Steam was still seen issuing from the same spot.

We had no means of making temperature observations of the mass or of the water, but Lieutenant Gutsche said he felt no heat on the island, and the water was very cold.

The water around the island was dirty, and the surface covered with bubbles. A few dead fish were found upon Pelican Point.

On the 4th of June another visit was made, The size of the

sland above water appeared somewhat diminished and levelled down to not more than half the height observed on the 1st, but under water was about the same. The soundings had not altered nor had the smell disappeared.

No further visits were made until the 7th of June, when it was found that the island had entirely disappeared. Careful soundings were again taken over the spot. The bottom had assumed its original depth, and no sign of the island was to be found. The water was dirty and covered with bubbles on the surface as before, and the smell of sulphuretted hydrogen was still perceptible in the air.

Nothing happened on the coast about the time of the upheaval of the island to indicate that anything unusual was taking place. A fairly high tide occurred a night or two previous to the appearance of the island, and a report came from Swakopmund that a very heavy sea had swept away 30 metres of a breakwater in course of construction there by the German Government; but as similar heavy seas are frequent at this time of year on this coast, so exposed to the full force of the South Atlantic, no great importance can be attached to the occurrence.

From the first appearance of the island on the 1st of June a constant look-out was kept, but there was no reappearance of it up to the time of my departure from Walfish Bay on the 10th of July.

The following facts are interesting to consider in connection with the phenomena, viz. :—

The remarkable soundings mentioned in the *South African Pilot*, referred to above :

The existence of sulphur holes in various spots on the peninsula and at the head of the Bay :

The frequent evolution of sulphuretted hydrogen gas during the winter months; the dirty appearance of the water with the occurrence of bubbles on the surface similar to those seen over the spot where the island disappeared; also the fact of fishes becoming suffocated during these times and floating on the surface of the water.

As a probable cause of the presence of gases in the mud of Walfish Bay, large quantities of animal matter must from time to time be collected in the still water of the Bay from the myriads of seabirds there, and from the flamingoes, pelicans, and other birds that exist in the lagoons at the head of the Bay. The Bay also abounds with fish of various kinds, and remains of large numbers of whales are strewn along the coast for many miles.

As a matter pointing to submarine disturbance near the locality, there was a breakage in the telegraph cable to German territory, which reaches the shore at Walfish Bay. (See chart, Plate XXVIII.) This breakage took place a few weeks previous to the upheaval of the island, and I was informed by the manager of the Cable Company's office at Swakopmund that the break occurred about 10 miles from the shore, or 6 miles from the site of the island. The fracture was a most unusual one, the cable being cut clean through, not jagged or chafed, as is the case in most submarine cable fractures.

The following gentlemen were present at the several visits made to the island on the 1st, 2nd, 4th, and 7th of June: The Resident Magistrate, J. J. Cleverley, Esq., Captain C. Richardson, Lieutenants A. Borchers and C. Gutsche, and Dr. Sterne, of the Cape Garrison Artillery, who were stationed at Walfish Bay; and the author of this notice, Frank W. Waldron, of the Public Works Department, Cape Town.

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## PLATES XXVIII-XXXI.

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- PLATE XXVIII. Chart of Walfish Bay, showing the site of the mud island which appeared off Pelican Point on June 1st, 1900.
- „ XXIX. The island as seen from Pelican Point on June 1st.
- „ XXX. The island as seen from Pelican Point on June 2nd.
- „ XXXI. View of a portion of the island as seen from a distance of 50 feet on June 2nd.